

Listing and Amendments to the Claims

This listing of claims will replace the claims that were published in the PCT Application and annexed to the International Preliminary Report on Patentability:

1. (Currently amended) Data requesting device (2) through at least one first communication network (5) from at least one data server (10), said data requesting device (2) being able to support up to a maximum bandwidth rate (CBW), and comprising:

- at least one input buffer (21) having an input buffer side (CSOCKBUFSZ),
- sending means (22) for sending requests (REQU) of determined data to the server (10) via at least one second communication network (6),
- and receiving means (23) for receiving streamed data (DATA) from said server (10) into said input buffer (21) via said first communication network (5) and for providing said data to processing means (24) for them to be exploited,

characterized in that wherein said data requesting device (2) comprises retrieving means (25) for retrieving information (INFO) representative of said maximum bandwidth rate (CBW) and of said input buffer side (CSOCKBUFSZ), and in that said sending means (22) are intended to transmit to said server (10) via said second network (6) said information (INFO), so that said server (10) is able to determine at least one size (UNIT_SIZE) of successive portions of said required data and at least one delay (PERIOD) between two successive sending steps of said portions.

2. (Currently amended) Data requesting device (2) according to claim 1, ~~characterized in that wherein~~ it comprises a data pump (27) intended to extract data available in said input buffer (21) and to transfer said data into a central memory (26) for said data to be exploited by said processing means (24), said data pump (27) being able to produce a pause control signal (XOFF) when said data in said central

memory (26) exceed a predetermined high threshold level (~~HFIFO~~) of said central memory (26), and in that said sending means (22) are intended to transmit said pause control signal (~~XOFF~~) to said server (10).

3. (Currently amended) Data requesting device (2) according to ~~any of claims 1 or 2, characterized in that~~ wherein said data pump (27) is able to produce a resume control signal (~~XON~~) when the data transfer from said input buffer (24) to said central memory (26) has been paused and said data in said central memory (26) decrease down to a predetermined low threshold level (~~LFIFO~~) of said central memory (26), and in that said sending means (22) are intended to transmit said resume control signal (~~XON~~) to said server (10).

4. (Currently amended) Data requesting device (2) according to ~~any of claims 2 or 3, characterized in that~~ wherein it comprises an injector (28) intended to transfer said data from said central memory (26) to said processing means (24) only when said data in said central memory (26) fill up to a predetermined middle threshold level (~~MFIFO~~) of said central memory.

5. (Currently amended) Data requesting device (2) according to ~~any of claims 2 to 4, characterized in that~~ wherein at least one of said threshold levels (~~HFIFO, LFIFO, MFIFO~~) of said central memory (26) depends on a round-trip time (~~RTT~~) between said data requesting device (2) and said server (10).

6. (Currently amended) Data requesting device (2) according to ~~any of the preceding claim 1s, characterized in that~~ wherein said data requesting device (2) is able to produce pause (~~XOFF~~), resume (~~XON~~) and seek (~~SEEK~~) control signals for respectively pausing and resuming data streaming and for positioning at given appropriate places of said determined data, and said sending means (22) are intended to transmit to said server (10) sequences of successively said pause

(XOFF), seek (SEEK) and resume (XON) control signals, so as to allow at least one feature among fast motion and reverse motion.

7. (Currently amended) Decoder, ~~characterized in that it comprises~~ a data requesting device (2) according to ~~any of~~ claims 1 to 6.

8. (Currently amended) Data requesting process through at least one first communication network (5) from at least one data server (10) to a data requesting device (2) able to support up to a maximum bandwidth rate (CBW) and comprising at least one input buffer (21) having an input buffer side (CSOCKBUFSZ), said requesting process comprising the following steps:

~~-----~~ sending requests (REQU) of determined data to the server (10) via at least one second communication network (6),
- and receiving streamed data (DATA) from said server (10) into said input buffer (21) for them to be exploited,

~~characterized in that~~ wherein said data requesting process comprises sending information (INFO) representative of said maximum bandwidth rate (CBW) and of said input buffer side (CSOCKBUFSZ) from said data requesting device (2) to said server (10) via said second network (6), so that said server (10) is able to determine at least one size (UNIT_SIZE) of successive portions of said required data and at least one delay (PERIOD) between two successive sending steps of said portions,

said data requesting process being preferably intended to be executed by means of a data requesting device (2) compliant with ~~any of~~ claims 1 to 7.

9. (Currently amended) Data transmitting device (1)
comprising:

- receiving means (11) for receiving requests (REQU) of determined data from at least one data requesting device (2),

- specification means (12) for determining at least one size (UNIT_SIZE) of successive portions of said data to be provided to said data requesting device (2),

- and streaming means (13) for triggering streaming of said data portions (DATA) to said data requesting device (2),

said receiving means (11) being intended to receive from said data requesting device (2) information (INFO) representative of capacities of said data requesting device (2), and said specification means (12) being intended to determine said portion size (UNIT_SIZE) in function of said information (INFO),

~~characterized in that~~wherein:

- said capacities are the maximum bandwidth rate and input buffer size of said data requesting device :

- said specification means (12) are intended to determine at least one delay (PERIOD) between two successive sending steps of said portions in function of said information (INFO),

- and said streaming means (13) are intended to periodically trigger streaming of said data portions having said portion size (UNIT_SIZE) to said data requesting device (2), with a period equal to said delay (PERIOD),

said data transmitting device (1) being preferably provided for a data requesting device (2) according to any of claims 1 to 6.

10. (Currently amended) Data transmitting device (4) according to claim 9, ~~characterized in that~~ wherein said receiving means (11) are intended to receive pause control messages (~~XOFF~~) from said data requesting device (2), and said streaming means (13) are intended to pause said data streaming when one of said pause control messages (~~XOFF~~) is received.

11. (Currently amended) Data transmitting device (4) according to ~~any of claims 9 or 10~~, ~~characterized in that~~ wherein said data requesting device (2) being able to support up to a maximum bandwidth rate (~~CBW~~) and comprising at least one input buffer (21) having an input buffer side (~~CSOCKBUFSZ~~), said capacities consist in said maximum bandwidth rate (~~CBW~~) and said input buffer side (~~CSOCKBUFSZ~~).

12. (Currently amended) Data transmitting device (4) according to ~~any of claims 9 to 11~~, ~~characterized in that~~ wherein said receiving means (11) are intended to receive slow motion messages from said data requesting device (2), and said specification means (12) are intended to determine at least one increased value of said period (~~PERIOD~~) when said slow motion messages are received.

13. (Currently amended) Data transmitting device (4) according to ~~any of claims 9 to 12~~, ~~characterized in that~~ wherein said receiving means (11) are intended to receive at least one kind of messages among fast motion and reverse motion messages, from said data requesting device (2), and said data transmitting device (4) comprises parsing means (16) able to identify successive relevant places in said determined data for at least one of said fast and reverse motions, said specification means (12) being provided for successively positioning at said places, when one of said fast motion and reverse motion messages is received.

14. (Currently amended) Data transmitting process comprising the following steps:

- receiving requests ~~(REQU)~~ of determined data from at least one data requesting device ~~(2)~~, as well as information ~~(INFO)~~ representative of capacities of said data requesting device ~~(2)~~,
- determining at least one size ~~(UNIT_SIZE)~~ of successive portions of said data to be provided to said data requesting device ~~(2)~~, in function of said information ~~(INFO)~~,
- and streaming said data portions ~~(DATA)~~ to said data requesting device ~~(2)~~,

~~characterized in that~~wherein:

~~-----~~ said capacities are the maximum bandwidth rate and input buffer size of said data requesting device :

- said specification step includes determining at least one delay ~~(PERIOD)~~ between two successive sending steps of said portions in function of said information ~~(INFO)~~,
- and said streaming step includes periodically streaming said data portions having said portion size ~~(UNIT_SIZE)~~ to said data requesting device ~~(2)~~, with a period equal to said delay ~~(PERIOD)~~,

said data transmitting process being preferably intended to be executed by a data transmitting device ~~(1)~~ compliant with ~~any of~~ claims 9 to 13.

15. (Currently amended) Computer program product, ~~characterized in that it comprises~~comprising program code instructions for executing the steps of ~~one of the~~ processes of claims 8 and 14 when said program is executed on a computer.